UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,167	09/28/2001	Hao-hua Chu	10745/027	4931

26529   7590   04/05/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN/PDC
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER
RIES, LAURIE ANNE

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/967,167	CHU ET AL.
	Examiner	Art Unit
	Laurie Ries	2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>26 November 2004</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-53</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-53</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communications: amendment, filed 11/26/2004, to the

original application filed 9/28/2001.

Claims 1-53 are pending. Claims 32-53 are newly added claims. Claims 1, 11, 21, 32,

42, 43, and 53 are independent claims.

Response to Arguments

Applicant's arguments, see amendment, filed 9/7/2004, with respect to the

rejection(s)of claim(s) 1-31 under 35 U.S.C. 103(a) have been fully considered and are

persuasive. Therefore, the rejection has been withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claim 46 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claim 46 recites the limitation ""in c)" in lines 5-6. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-10, 21-33, 35-36, and 38-42 are rejected under 35 U.S.C. 103(a)

as being unpatentable over "User Interface Markup Language (UIML) Draft

Specification Document Version 17", Harmonia, Inc, hereafter referred to as

"Harmonia") in view of Ikemoto (U.S. Patent 5,969,717).

As per claims 1, 2, 21 and 23, Harmonia discloses a system and method f

dynamically adapting a presentation generated by an application to a display screen of

any of a number of different device platforms including a) providing a number of

graphical user interface components in a hierarchical configuration (See Harmonia,

Page 23, Section 6.4), b) arranging the graphical user interface components on a page

as a function of the hierarchy (See Harmonia, Page 24, Section 6.4.1), and where b)

includes nesting, or identifying graphical user interface components that represent the

lowest hierarchical level and a highest layout priority within the hierarchical configuration

(See Harmonia, Page 24, Section 6.4.1, Paragraph 2). Harmonia does not disclose

expressly c) selectively transforming one or more of the graphical user interface

components to adjust the size of the page to be closer to the maximum fill of a display

screen of one of the different device platforms running the application than filled without

transformation. Ikemoto discloses that the graphical user interface components are

added or transformed to adjust to the size of the page of the display device. (See

Ikemoto, Column 11, lines 14-33). Harmonia and Ikemoto are analogous art because

they are from the same field of endeavor of creating graphical user interfaces. At the

time of the invention it would have been obvious to a person of ordinary skill in the art to

combine the arrangement and transformation of graphical user interface components of

Ikemoto with the method of adapting a presentation to heterogeneous device platforms

of Harmonia. The motivation for doing so would have been to determine the display

position of the components. (See Ikemoto, Column 10, lines 26-27). Therefore, it

would have been obvious to combine Ikemoto with Harmonia for the benefit of

determining the display position of the components to obtain the invention as specified

in claims 1, 2, 21 and 23.

As per claims 4-6 and 24, Harmonia and Ikemoto disclose the limitations of

claims 1 and 21 as described above. Ikemoto also discloses selecting alternative

graphical user interface components as a function of transformation rules when the

display screen is over-filled by the page (See Ikemoto, Column 12, lines 39-54), adding

graphical user interface components to the page as a function of the hierarchical

configuration when the display screen is under-filled by the page (See Ikemoto, Column

14, lines 39-61), and repeating a), b) and c) to generate another page with the remaining graphical user interface components when the page substantially fills the display screen (See Ikemoto, Figure 14, element 1403). Harmonia and Ikemoto are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the arrangement and transformation of graphical user interface components of Ikemoto with the method of adapting a presentation to heterogeneous device platforms of Harmonia. The motivation for doing so would have been to determine the display position of the components and thereby increase the working efficiency of the interface designer. (See Ikemoto, Column 10, lines 26-27, and Column 2, lines 20-24). Therefore, it would have been obvious to combine Ikemoto with Harmonia for the benefit of determining the display position of the components and increasing the working efficiency of the interface designer to obtain the invention as specified in claims 4-6 and 24.

As per claims 7 and 28, Harmonia and Ikemoto disclose the limitations of claims 1 and 21 as described above. Harmonia also discloses applying a set of style guide parameters to each of the graphical user interface components to create uniformity in the visual appearance of the graphical user interface components (See Harmonia, Page 25, Section 6.5).

As per claim 8, Harmonia and Ikemoto disclose the limitations of claim 1 as described above. Harmonia also discloses arranging the graphical user interface

components as a function of properties specified by the application (See Harmonia, Page 25, Section 6.5, paragraph 1).

As per claim 9, Harmonia and Ikemoto disclose the limitations of claim 1 as described above. Harmonia also discloses generating a set of proposed device platform specific pages (See Harmonia, Page 10-11, Section 3.1.3) and selecting at least one device platform specific page from the set to display the graphical user interface components with the display screen (See Harmonia, Page 23, Section 6.3, paragraph 1 – Description).

As per claim 10, Harmonia and Ikemoto disclose the limitations of claim 9 as described above. Harmonia also discloses sizing each of the proposed device platform specific pages as a function of the graphical user interface components arranged to form each of the proposed device platform specific pages (See Harmonia, Page 25, Section 6.5, paragraph 2).

As per claim 22, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses that the hierarchical configuration is an intermediate representation including a number of container nodes, such as frames, and a number of component nodes, the component nodes representing the graphical user interface components (See Harmonia, Page 24, Section 6.4.1, paragraph 3).

As per claim 25, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses that the graphical user interface components include device platform independent graphical user interface components (See Harmonia, Page 9, Section 3.1).

As per claims 26 and 27, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses transforming the graphical user interface components to graphical user interface components that are specific to the target device platform and transforming a composite graphical user interface component including a number of graphical user interface components to a composite graphical user interface component that is specific to a target device platform (See Harmonia, Page 24, Section 6.4.1).

As per claim 29, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses that the target device platform includes one of a pager, wireless phone, personal digital assistant, hand-held personal computer, vehicle navigation system, and notebook personal computer (See Harmonia, Page 5, Section 1.3, paragraph 4 – "Device").

As per claim 30, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses that the transformation module is operable to generate a set of possible device specific pages of various sizes and select therefrom (See Harmonia, Page 5, Section 1.3, paragraph 7 – "Rendering").

As per claim 31, Harmonia and Ikemoto disclose the limitations of claim 21 as described above. Harmonia also discloses that the target device platform includes any one of a number of different device platforms (See Harmonia, Page 5, Section 1.3, Paragraph 6 – "Platform").

As per claims 32 and 35-36, Harmonia discloses an article of manufacture having one or more recordable media storing instructions thereon which, when executed by a

system, causes the system to dynamically adapt a presentation generated by an

application to a display screen of any of a number of heterogeneous device platforms

according to a method including a) providing a number of graphical user interface

components in a hierarchical configuration (See Harmonia, Page 23, Section 6.4), and

b) arranging the graphical user interface components on a page as a function of the

hierarchy (See Harmonia, Page 24, Section 6.4.1). Harmonia does not disclose

expressly c) selectively transforming one or more of the graphical user interface

components to adjust the size of the page to be closer to the maximum fill of a display

screen of one of the heterogeneous device platforms running the application then filled

without transformation, selecting alternative graphical user interface components as a

function of transformation rules when the display screen is over-filled by the page, or

adding graphical user interface components to the page as a function of the hierarchical

configuration when the display screen is under-filled by the page. Ikemoto discloses

that the graphical user interface components are added or transformed to adjust to the

size of the page of the display device. (See Ikemoto, Column 11, lines 14-33).

Harmonia and Ikemoto are analogous art because they are from the same field of

endeavor of creating graphical user interfaces. At the time of the invention it would

have been obvious to a person of ordinary skill in the art to combine the arrangement

and transformation of graphical user interface components of Ikemoto with the method

of adapting a presentation to heterogeneous device platforms of Harmonia. The

motivation for doing so would have been to determine the display position of the

components. (See Ikemoto, Column 10, lines 26-27). Therefore, it would have been

obvious to combine Ikemoto with Harmonia for the benefit of determining the display

position of the components to obtain the invention as specified in claims 32 and 35-36.

As per claim 33, Harmonia and Ikemoto disclose the limitations of claim 32 as

described above. Harmonia also discloses nesting, or identifying graphical user

interface components representative of the lowest hierarchical level and a highest

layout priority within the hierarchical configuration (See Harmonia, Page 24, Section

6.4.1, paragraph 2).

As per claim 38, Harmonia and Ikemoto disclose the limitations of claim 32 as

described above. Harmonia also discloses applying a set of style guide parameters to

each of the graphical user interface components to create uniformity in the visual

appearance of the graphical user interface components (See Harmonia, Page 25,

Section 6.5).

As per claim 39, Harmonia and Ikemoto disclose the limitations of claim 32 as

described above. Harmonia also discloses arranging the graphical user interface

components as a function of properties specified by the application (See Harmonia,

Page 25, Section 6.5, paragraph 1).

As per claim 40, Harmonia and Ikemoto disclose the limitations of claim 32 as

described above. Harmonia also discloses generating a set of proposed device

platform specific pages (See Harmonia, Page 10-11, Section 3.1.3), and selecting at

least one device platform specific page from the set to display the graphical user

interface components with the display screen (See Harmonia, Page 23, Section 6.3,

paragraph 1 – "Description").

As per claim 41, Harmonia and Ikemoto disclose the limitations of claim 40 as described above. Harmonia also discloses sizing each of the proposed device platform specific pages as a function of the graphical user interface components arranged to form each of the proposed device platform specific pages (See Harmonia, Page 25, Section 6.5, paragraph 2).

Claim 42 is rejected on the same basis as claim 1.

Claims 3, 11-20, 34, and 43-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over "User Interface Markup Language (UIML) Draft Specification Document Version 17", Harmonia, Inc, hereafter referred to as "Harmonia") in view of Ikemoto (U.S. Patent 5,969,717) as applied to claims 1 and 32 above, and further in view of Kashiwagi (U.S. Patent 6,037,939).

As per claim 3, Harmonia and Ikemoto disclose the limitations of claim 1 as described above. Harmonia and Ikemoto do not disclose expressly reducing the size of the graphical user interface components as a function of transformation rules when the display screen is over-filled by the page. Kashiwagi discloses that the size of a graphical user interface component is resized in response to the operable range and size of the overall image. (See Kashiwagi, Column 14, lines 28-44). Harmonia, Ikemoto, and Kashiwagi are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the resizing or reducing of a graphical user interface component with the system and method of

adapting a presentation to heterogeneous device platforms of Harmonia and Ikemoto.

The motivation for doing so would have been to allow the user to interactively

manipulate the data retained in the system including changing a displayed image. (See

Kashiwagi, Column 2, lines 44-60). Therefore, it would have been obvious to combine

Kashiwagi with Harmonia and Ikemoto for the benefit of allowing the user to manipulate

the data to obtain the invention as specified in claim 3.

As per claims 11, 43, and 53, Harmonia discloses an apparatus and method of

dynamically adapting a presentation generated by a scaleable application to a display

screen of any of a number of different device platforms including a) providing an

intermediate representation including a number of container nodes in a hierarchical

configuration (See Harmonia, Page 24, Section 6.4.1, paragraph 3), b) nesting, or

identifying a first container node with the lowest hierarchical level and the highest layout

priority in the intermediate representation (See Harmonia, Page 24, Section 6.4.1,

paragraph 2), and c) arranging on a page at least one graphical user interface

component associated with the first container node (See Harmonia, Page 24, Section

6.4.1). Harmonia does not disclose expressly d) applying a transformation rule to

reduce the size of the at least one graphical user interface component when the page

over fills a display screen of one of the different device platforms or e) adding at least

one graphical user interface component from a hierarchically related container node

when the page under fills the display screen. Ikemoto discloses that the graphical user

interface components are added or transformed to adjust to the size of the page of the

display device. (See Ikemoto, Column 11, lines 14-33). Harmonia and Ikemoto are

analogous art because they are from the same field of endeavor of creating graphical

user interfaces. At the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine the arrangement and transformation of graphical user

interface components of Ikemoto with the method of adapting a presentation to

heterogeneous device platforms of Harmonia. The motivation for doing so would have

been to determine the display position of the components. (See Ikemoto, Column 10,

lines 26-27). Therefore, it would have been obvious to combine Ikemoto with Harmonia

for the benefit of determining the display position of the components to obtain the

invention as specified in claim 11. Kashiwagi discloses that the size of a graphical user

interface component is resized in response to the operable range and size of the overall

image. (See Kashiwagi, Column 14, lines 28-44). Harmonia, Ikemoto, and Kashiwagi

are analogous art because they are from the same field of endeavor of creating

graphical user interfaces. At the time of the invention it would have been obvious to a

person of ordinary skill in the art to include the resizing or reducing of a graphical user

interface component with the method of Harmonia and Ikemoto. The motivation for

doing so would have been to allow the user to interactively manipulate the data retained

in the system including changing a displayed image. (See Kashiwagi, Column 2, lines

44-60). Therefore, it would have been obvious to combine Kashiwagi with Harmonia

and Ikemoto for the benefit of allowing the user to manipulate the data to obtain the

invention as specified in claims 11, 43 and 53.

As per claims 12 and 44, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Harmonia also discloses selecting

an appropriate transformation rule as a function of at least one of the graphical user

interface components and capabilities of the different device platform (See Harmonia,

Page 25, Section 6.5, paragraph 2).

As per claims 13 and 45, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Ikemoto also discloses that the

transformation rule is applied as a function of selection rules which indicate the degree

of general applicability of the transformation rule to the different display screens (See

Ikemoto, Column 2, lines 39-44). Harmonia, Ikemoto, and Kashiwagi are analogous art

because they are from the same field of endeavor of creating graphical user interfaces.

At the time of the invention it would have been obvious to a person of ordinary skill in

the art to include the selection rules of Ikemoto with the method of Harmonia, Ikemoto,

and Kashiwagi. The motivation for doing so would have been to create a graphical user

interface interactive screen that is both operable and easy to maintain (See Ikemoto,

Column 2, lines 27-30). Therefore, it would have been obvious to combine Ikemoto with

Harmonia, Ikemoto, and Kashiwagi for the benefit of creating a graphical user interface

interactive screen that is both operable and easy to maintain to obtain the invention as

specified in claims 13 and 45.

As per claims 14 and 46, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Ikemoto also discloses generating

a list of possible graphical user interface components sorted by size (See Ikemoto,

Figure 9), selecting a graphical user interface component from the list (See Ikemoto,

Column 2, lines 44-46), and interchanging the graphical user interface component

arranged on the page in c) with the graphical user interface component from the list

(See Ikemoto, Column 14, lines 39-61). Harmonia, Ikemoto, and Kashiwagi are

analogous art because they are from the same field of endeavor of creating graphical

user interfaces. At the time of the invention it would have been obvious to a person of

ordinary skill in the art to include the selection rules of Ikemoto with the method of

Harmonia, Ikemoto, and Kashiwagi. The motivation for doing so would have been to

create a graphical user interface interactive screen that is both operable and easy to

maintain (See Ikemoto, Column 2, lines 27-30). Therefore, it would have been obvious

to combine Ikemoto with Harmonia, Ikemoto, and Kashiwagi for the benefit of creating a

graphical user interface interactive screen that is both operable and easy to maintain to

obtain the invention as specified in claims 14 and 46.

As per claims 15 and 47, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Harmonia also discloses

transforming a graphical user interface component to a graphical user interface

component that is specific to one of the different device platforms (See Harmonia, Page

9, Section 3.1).

As per claims 16 and 48, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Harmonia also discloses

transforming a composite graphical user interface component including a number of

graphical user interface components associated with a container node to a composite

graphical user interface component specific to the different device platform (See

Harmonia, Page 24, Section 6.4.1).

As per claims 17 and 49, Harmonia, Ikemoto and Kashiwagi disclose the limitations of claims 11 and 43 as described above. Harmonia also discloses nesting, or selecting a container node that is one of a hierarchical sibling or related higher level container node (See Harmonia, Page 24, Section 6.4.1).

As per claims 18 and 50, Harmonia, Ikemoto and Kashiwagi disclose the limitations of claims 11 and 43 as described above. Kashiwagi also discloses that the size of a graphical user interface components are resized in response to the operable range and size of the overall image for each interface component. (See Kashiwagi, Figure 8, element S604, and Column 14, lines 13-59). Harmonia, Ikemoto, and Kashiwagi are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the resizing or reducing of the graphical user interface components with the method of Harmonia and Ikemoto. The motivation for doing so would have been to allow the user to interactively manipulate the data retained in the system including changing a displayed image. (See Kashiwagi, Column 2, lines 44-60). Therefore, it would have been obvious to combine Kashiwagi with Harmonia and Ikemoto for the benefit of allowing the user to manipulate the data to obtain the invention as specified in claims 18 and 50.

As per claims 19 and 51, Harmonia, Ikemoto and Kashiwagi disclose the limitations of claims 11 and 43 as described above. Harmonia also discloses identifying a container node with at least one graphical user interface component as a hierarchical child (See Harmonia, Page 24, Section 6.4.1).

As per claims 20 and 52, Harmonia, Ikemoto and Kashiwagi disclose the

limitations of claims 11 and 43 as described above. Harmonia also discloses laying out

the graphical user interface components on the page as a function of the hierarchical

configuration and constraints specified within the application graphical user interface

(See Harmonia, Page 24, Section 6.4.1).

Claim 34 is rejected on the same basis as claim 11.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over "User

Interface Markup Language (UIML) Draft Specification Document Version 17",

Harmonia, Inc, hereafter referred to as "Harmonia") in view of Ikemoto (U.S. Patent

5,969,717) as applied to claim 32 above, and further in view of Orr (U.S. Patent

5,895,477).

As per claim 37, Harmonia disclose the limitations of claim 32 as described

above. Ikemoto also discloses repeating providing a number of graphical user interface

components in a hierarchical configuration, arranging the graphical user interface

components on a page (See Ikemoto, Figure 14, element 1403). Harmonia and

Ikemoto do not disclose expressly selectively transforming one or more of the graphical

user interface components to generate another page with the remaining graphical user

interface components when the page substantially fills the display screen. Orr discloses

generating another page when the components do not fit in a single page (See Orr,

Column 21, lines 21-34). Harmonia, Ikemoto and Orr are analogous art because they

are from the same field of endeavor of organizing online content. At the time of the

invention it would have been obvious to a person of ordinary skill in the art to include the

generation of a new page when the components do not fit in a single page of Orr with

the system and method of Harmonia and Ikemoto. The motivation for doing so would

have been to provide an automatic means for adapting to changes in content and

design while maintaining relationships between content elements (See Orr, Column 2,

lines 43-47). Therefore, it would have been obvious to combine Orr with Harmonia and

Ikemoto for the benefit of providing an automatic means for adapting to changes in

content and design while maintaining relationships between content elements to obtain

the invention as specified in claim 37.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Schmitter (U.S. Patent 5,583,983) discloses a multi-platform object-

  oriented software development and deployment system.

- Scarborough (U.S. Patent 6,353,448) discloses a graphical user interface

  display method.

- Shirakawa (U.S. Patent 5,956,738) discloses an article layout device for

  automatic column text layout.

- The UIML Reference Manual, December 1997, discloses a manual for the

  use of the User Interface Markup Language (UIML).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Laurie Ries whose telephone number is (571) 272-4095. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Feild, can be reached at (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more

information about the PAIR system, see http://pair-direct.uspto.gov. Should you have

questions on access to the Private PAIR system, contact the Electronic Business Center

(EBC) at 866-217-9197 (toll-free).

LR

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER